

**Work Order ID 59809**

Friday, June 11, 2010 10:45:56 AM



Page 1

Item ID: D2052

Accept



Setup Start



Revision ID:

Item Name: Mounting Bracket

Stop



Start Date: 6/11/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 6/18/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:

*HP*

Date:

*10-6-11*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2052	Rev D								
100	FLOW WATER JET	0.00							
	Waterjet								
	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D2052								
<i>SUGS . 040</i>	Dwg Rev: <i>P</i>								
	Prog Rev: <i>P</i>								
	****grain direction along 3.878" ****								
	2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
	QC								
	Memo	0.00							
Quality Control									

*B10-6-23**27**B10-6-23*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC8- Inspect parts - second check  Memo	0.00 0.00		Swab 624		count 20 127			
130  Brake NC Brake NC	NC BRAKE  Memo Form as per Dwg D2052 using CNC Brake	0.00 0.00		SB 10/06/28		27			
140  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		Swab 628		count 20 127			

W/O:		WORK ORDER CHANGES					
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**NOTE:** Date & initial all entries

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Required Date: 6/18/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

Chemical Conversion Coat per QSI005 4.1

0.00

→ JH

10/06/25

227

0



HandFinish

Memo

0.00

Hand Finishing

160

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

M112583



Powdercoat

Memo

0.00

Powder Coating

START TIME:

3:20

OVEN TEMPERATURE:

320°

FINISH TIME:

3:50

27 BL 10-6-28.

170

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

JH 10/06/25

27

0

W/O:		WORK ORDER CHANGES					
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**NOTE:** Date & initial all entries

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Friday, June 11, 2010 10:45:56 AM



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Item ID: D2052

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Cust Item ID:

Required Date: 6/18/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 	Identify as per dwg & Stock Location: <u>005</u>	0.00							
Packaging	Memo	0.00							
Packaging									
190 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

*Handwritten signature and date: 6/10/2010 (27)*

*Handwritten signature and date: 10/06/2010*

*Handwritten signature and date: W 10/06/2010*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries



# Picklist Print

Friday, June 11, 2010 10:46:00 AM

Page 1

Work Order ID: 59809



Parent Item: D2052



Parent Item Name: Mounting Bracket

Start Date: 6/11/2010

Required Date: 6/18/2010

Comments: IPP C01.08.21 Added Finishing SM (Issue this IPP with part number D2053)  
 IPP Rev:D now water jet 07-10-25 DD  
 IPP Rev:E 08-05-14 chg to revD as per ECN1171 DD verified by:EC

Start Qty: 20.00

Required Qty: 20.00

M5052H32S.090

Purchased

No

100

sf

32.8000

0.129

2.715789

3.5



AS 10-6-23

5052-H32 .090 Sheet

## Location

## Loc Qty

## Loc Code

MAT22

32.8

100782

0.8

3019

32

3019

37

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



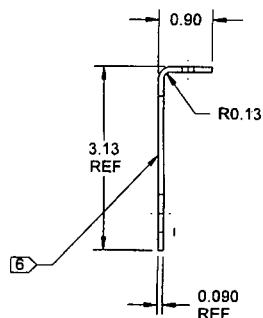
W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

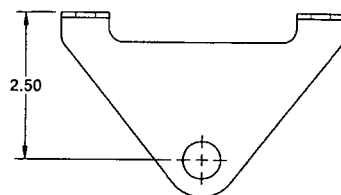
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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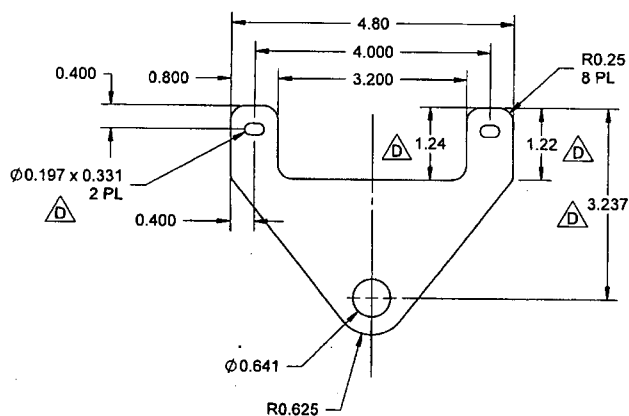
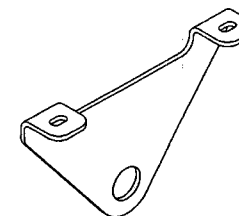
**NOTE:** Date & initial all entries



**D2052 BRACKET**



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39809  
*BS10-6-11*



GRAIN DIRECTION

**D2052F FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: 5052-H32 ALUMINUM SHEET 0.090 THICK PER QQ-A-250/8 OR AMS 4016 (REF DART SPEC M5052H32S.090) OR 6061-T6 (OR-T62) ALUMINUM SHEET 0.090 THICK PER QQ-A-250/11 OR AMS 4025/4027 (REF DART SPEC M6061T6S.090)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT BLACK SANTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2052" USING FINE POINT PERMANENT INK MARKER OR LABEL AFTER FINISH
- 7) WEIGHT: 0.08 lbs

RELEASED  
05-05-13

D	WIDEN SLOT (ZN B7-1); UPDATE FLAT PATTERN DIMENSIONS (ZN B5-1, B6-1); ADD 6061-T6 OPTION (ZN A5-1); ADD CHEMICAL CONVERSION COAT AND CHANGE TO BLACK SANTEX (ZN A6-1); ADD IDENTIFICATION (ZN A4-1); ADD WEIGHT (ZN A8-1); ADD GRAIN DIRECTION (ZN B4-1); REASON: PRODUCT IMPROVEMENT (REF PAR 08-012)	PH	08.04.28
C	ADD FLAT PATTERN	RF	99.04.30
B	ADD SLOT TO FOOT	BW	97.02.21
A	NEW ISSUE	BW	92.01.12
REV.	DESCRIPTION	BY	DATE
DESIGN	BW	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D2052</b> TITLE <b>BRACKET</b> REV. D SHEET 1 OF 1 SCALE NTS	
DRAWN	JP		
CHECKED	JP		
MFG. APPR.	JP		
APPROVED	JP		
DE APPR.	JP		
DATE	08.04.28	COPYRIGHT © 1992 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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